

Participatory Educational Research (PER) Vol.12(1), pp. 287-303, January 2025 Available online at <u>http://www.perjournal.com</u> ISSN: 2148-6123 http://dx.doi.org/10.17275/per.25.15.12.1

# Improving the Reading Skills of Students with Mild Intellectual Disabilities through Repeated and Paired Reading Techniques

Ayfer ŞAHİN\*

Department of Primary Education, Kırşehir Ahi Evran University, Kırşehir, Türkiye ORCID: 0000-0001-9903-1445

# Fatma Cahide ÖZÇELİK

Department of Primary Education, Kırşehir Ahi Evran University, Kırşehir, Türkiye ORCID: 0000-0001-8672-6459

Article history	This study aims to analyze the effectiveness of fluent reading strategies,
Received:	specifically "paired reading" and "repeated reading," on the development
11.09.2024	of reading skills of two students with mild intellectual disability. In the
Received in revised form: 19.11.2024 Accepted:	study, two fourth-grade students with mild intellectual disabilities participated in an intervention program aimed at improving their reading skills. Two 4th grade students, one girl and one boy, who attended the support education room as well as the regular classes of the primary
04.12.2024	school, were included in the intervention programme. The AB single-
Key words: Primary school students,	case design was utilized, as this design is the most commonly used for detecting the effects of. The study employed purposeful sampling to
Reading, fluent reading,	select participants based on specific criteria. The criteria for inclusion in
repeated reading strategy, paired reading strategy.	the study were having a mild intellectual disability, attending the support class, and experiencing difficulty in reading and comprehension. The processes lasted for 7 weeks, equating to 35 class hours. Data were collected through instruments such as the Error Analysis Inventory, video recordings, narrative, and informative texts, and reading comprehension achievement tests. The results revealed improvements in students' word definitions, reading speeds, reading skills, and comprehension levels. These results suggest that the study recommends employing paired and repeated reading strategies to enhance the reading and comprehension skills of students facing reading and learning difficulties.

#### Introduction

Reading, a fundamental language skill, is formally taught from the first grade of primary education and continues to be developed throughout life. Every individual learns to read in this process, which commences in primary school. However, it is well-known that a significant majority of individuals who learn to read encounter difficulties in fluent reading and comprehension (Hulme, & Snowling, 2011; Kaya-Özgül, & Ateş, 2023; Torgesen, & Hudson, 2006). According to the International Reading Panel (2000), good reading skills are expected to encompass five components: phonemic awareness, phonics, vocabulary, reading comprehension, and fluency (National Reading Panel, 2000; Therrien, 2004, p.252).

<sup>\*</sup> Correspondency: f.c.zclk06@gmail.com

Over time, various definitions of reading and comprehension have progressed, reflecting changing educational paradigms. Initially, these definitions primarily centered on the physical processes of reading. The constructivist approach has broadened our understanding of reading and comprehension (Güneş, 2009; Pearson, & Cervetti, 2015; Sarroub, & Pearson, 1998). So that in addition to the physical aspects such as vision, hearing, and pronunciation, the primary focus has shifted towards understanding the content of what is read. The most important factor affecting comprehension is undoubtedly background knowledge and vocabulary (Şahin & Bozdağ, 2020; Şahin, 2013). In literature, individuals establish connections between texts and derive new meanings through their background knowledge.

According to Şahin (2011), reading involves seeing, perceiving, understanding the meaning, and pronunciation of written or visual symbols. Reading is a dynamic process of meaning-making that requires active and effective communication between the writer and the reader. Indeed, Akyol (2019) defines reading as a process of constructing meaning carried out in a regular environment based on effective communication between the writer and the reader, using background knowledge, and in accordance with an appropriate method and purpose. Most definitions concerning reading, as observed in studies by Akyol (2019) and Şahin (2011), emphasize pronunciation and comprehension.

Developing reading and comprehension skills in educational programs and teaching processes makes a significant contribution to giving people's lives meaning. Therefore, teachers need to be knowledgeable and competent in how to teach and foster this ability in students. Nowadays, the most important aspect of reading is "constructing meaning from what is reading in: other words, comprehension" (Akyol, 2019, p.29). If analysis and comprehension do not occur, it means that the purpose of reading has not been achieved (Pearson, & Cervetti, 2015).

According to Güneş (2009), comprehension involves determining the meaning of a text. This process requires thinking about reasons, investigating, drawing conclusions, and evaluating. Comprehension includes mental activities such as examining, selecting, deciding, translating, interpreting, analyzing, and evaluating. Throughout the process of comprehension, these mental activities are integrated with prior knowledge, and the text is interpreted take into account the reader's experiences.

Reading comprehension is a prerequisite for academic success because individuals access and utilize new information in their lives through this skill. Comprehension involves accurately transcribing words and sentences in the text, along with all elements including punctuation marks and other symbols, to grasp the main idea, establish relationships between texts, and make inferences. Developing reading comprehension skills enables students to analyze texts more effectively and understand the information they contain better (Çoban-Sural, & Akyol, 2020; Duke, & Pearson, 2002; Snow, 2002). Developing fluent reading skills is considered essential for enhancing reading comprehension abilities.

Fluent reading is a prerequisite for full comprehension, as noted by Begeny, & Silber (2006), Breznitz (1997), & Dufva, Niemi, & Voaten (2001). It involves reading smoothly, without pauses or unnecessary repetitions of words or sounds, paying attention to emphasis and intonation. In the literature, fluent reading is commonly defined as the ability to read with correct, automatic, and appropriate prosody that enhances comprehension (Conderman, & Strobel, 2008; Eckert, Dunn, & Ardoin, 2006; Hudson, Lane, & Pullen, 2005; Kuhn, Schwanenflugel, & Meisinger, 2010; Rasinski, 1994; Rasinski, 2004). Rasinski (2003) defines fluency as the capacity to read at a fast pace, with ease, and expressiveness, conveying



meaningful intonation and expression. Fluent reading necessitates prosody, accurate reading, and automatic processing (Conderman, & Strobel, 2008; Deeney, 2010; Eckert, Dunn, & Ardoin, 2006; Kuhn, Schwanenflugel, & Meisinger, 2010; Pikulski & Chard, 2005). Essentially, fluent reading resembles natural conversation, making listeners feel as though they are being spoken to rather than read to (Şahin, 2013).

LaBerge, & Samuels (1974), and Samuels (1997) defined fluent reading as "automaticity." Automaticity refers to the student's ability to read smoothly and effortlessly, enabling them to derive meaning without getting stuck on individual words. Automatic processing serves as the foundation for fluent reading and plays a crucial role in reading comprehension (Berkeley, Mastropieri & Scruggs, 2011; Kuhn et al., 2010). According to La Berge and Samuels, the human brain has limited attention capacity, necessitating that one of two complex tasks must become automatic to be performed simultaneously. Consequently, students can focus on comprehension only once they achieve automaticity or fluency in reading. The initial step toward achieving this automaticity involves recognizing and decoding written words (Biemiller, & Siegel, 1997).

The difference in understanding the text results from inadequate decoding of words within the text (Coyne, Kame'enui, & Simmons, 2001; Hudson, Lane, & Pullen, 2005; Shelton, Wexler, Silverman & Stapleton, 2019; Vaughn, & Thompson, 2004). Readers with underdeveloped or less developed word recognition skills are often preoccupied with decoding words, so they cannot allocate much time to comprehension. At this point, it can be said that individuals with a strong vocabulary are better readers (Di Blasi et al., 2019; Georgiou, Inoue, & Parrilla, 2023; Şahin, 2013; Yılmaz, 2008; Wakeman, Pennington, Cerrato, Saunders, & Ahlgrim-Delzell, 2021). When readers complete word recognition and distinction tasks correctly and quickly, they can focus their attention on grasping the entire text rather than individual words (Hudson, Lane, & Pullen, 2005; Rasinski, 2004; Torgesen, 2000; Vaughn, & Thompson, 2004).

Fluent reading is an important topic that should be emphasized in the teaching of reading and writing from the first grade of primary school onwards. Repeated reading, one of the most studied methods for improving fluent reading (Hudson, Lane, & Pullen, 2005), involves reading a short, meaningful text repeatedly until fluency is achieved (Samuels, 1997). In this activity, students read a text alongside a more fluent reader, either in groups or individually. They then continue to read the text on their own until they achieve fluency comparable to the model reader. This technique strengthens word recognition and comprehension skills by increasing exposure to the text (LaBerge, & Samuels, 1974; Samuels, as cited in Kuhn & Stahl, 2003; Support to Basic Education Project, 2004). Herman (1985), as cited in O'Connor et al. (2007), notes that repeated reading enhances reading rate and word accuracy due to multiple encounters with the same words. Repeated exposure to words in context leads to a strengthening of mental representations of words, which in turn leads to faster recognition (Monster, Tellings, Burk, Keuning, Segers, and Verhoeven, 2022).

Repeated reading also provides expertise in acquiring strategic reading skills to improve reading (Blum & Koskinen, 1991). Experts have emphasized that the repeated reading technique can be used to help students, both with and without reading disabilities, read a text fluently and understand it (Therrien, 2004; Therrien, & Kubina, 2006; Faver, 2009). Research indicates that repeated reading can increase fluent reading (Hudson, et al., 2005; Therrien, 2004; Winn, et al., 2006). It is believed that repeated reading may also be effective in improving vocabulary and comprehension levels for students with mild intellectual disabilities.



Another method that can be used to improve fluent reading is paired reading. Paired reading involves students reading a text together with a teacher or a proficient reader. Until the student gains enough confidence to read the text alone, a proficient reader accompanying the student, or the teacher provides support (Support to Basic Education Project, 2004). In paired reading, the book or text to be read by the student should be carefully selected. After discussing the visuals and main headings of the book or text, the reader and the student should read aloud together. During the reading process, if the child wants to read on their own at some points, they should be allowed to do so (Akyol, 2019). Since this technique takes place under the guidance of a proficient reader, it helps the student read the text with correct pronunciation and emphasis. Paired reading helps the student better understand words and sentences and analyze the text more effectively. Additionally, this technique may increase the student's reading speed and boost their confidence (Rasinski, 2012; National Reading Panel, 2000).

In the literature, there are significant findings indicating that repeated and paired reading techniques improve reading skills (Adviento-Rodulfa, & Lopez, 2022; Alghafri, & Al Hosni, 2023; Çayır, & Ulusoy, 2014; Dündar, & Akyol, 2014; Elhoweris, 2017; Gorsuch, & Taguchi, 2008; Herberg, McLaughlin, Derby, & Weber, 2012; Kardaş-İşler, & Şahin, 2016; Ketenoğlu-Kayabaşı, & Akyol, 2018). Based on these significant findings, it is considered that fluent reading techniques can also be used to support and improve the reading skills of students with mild intellectual disabilities. Therefore, the aim of this planned study is to determine the effects of the "paired reading" and "repeated reading" techniques on the reading skills of two 4th grade students who experience mild learning and reading difficulties and also attend support services classes alongside their regular classes. The research problem statement is defined as "What is the effect of paired reading and repeated reading on the reading and comprehension levels of 4th grade students with mild intellectual disabilities?" Within the framework of this general research problem statement, the answers to the following sub-problems have been sought:

- What is the effect of paired reading and repeated reading on the reading levels of 4th grade students with mild intellectual disabilities?
- What is the effect of paired reading and repeated reading on the comprehension levels of 4th grade students with mild intellectual disabilities?
- How do paired reading and repeated reading techniques affect the classroom participation and interest in reading of 4th grade students with mild intellectual disabilities according to the researcher's observations?

# Method

# **Research Design**

In the study, two 4th grade students with mild intellectual disabilities participated in an intervention program aimed at improving their reading skills. Two 4th grade students, one girl and one boy, who attended the support education room (Ministry of National Education, 2018) as well as the regular classes of the primary school, were included in the intervention programme. The AB single-case design was utilized, as this design is the most commonly used for detecting the effects of interventions (Dionne & Martini, 2011; Riley-Tilman & Burns, 2009). In this design, phase A represents the observations and measurements conducted at the outset, while phase B compares the participant's progress after the intervention with their status in phase A (Calet et al., 2019; Valenzuela et al., 2014).



# **Participants**

The study employed purposeful sampling to select participants based on specific criteria. The criteria for inclusion in the study were having a mild intellectual disability, attending the support class, and experiencing difficulty in reading and comprehension. Students with documented mild intellectual disabilities from the Guidance and Research Center (GRC) were selected for the study. As these students were all attending the same support class, one researcher engaged with the students independently and sequentially. Another researcher was present in the same setting as an observer. Two 4th grade students, one girl and one boy, attending both regular classes and the support class in a primary school in a small settlement in Central Anatolia, constituted the participants. The support class refers to an environment organized to provide educational support services to students who continue their education through full-time inclusion/integration and to meet the educational needs of gifted students in specific areas (Ministry of National Education, 2018). For ethical reasons, the names of the students were coded, with the girl student referred to as "K" and the boy student as "E" Both participants come from low socioeconomic backgrounds, with their fathers working as farmers and mothers as housewives. Volunteerism was sought in the study. Informed consent forms were obtained from the parents and teachers of the participants since they were primary school students.

# Data Collection

The "Error Analysis Inventory" tool was used to determine students' reading and comprehension levels. The Error Analysis Inventory consists of the Word Meaning and Percentage Determination Guide adapted to Turkish from Ekwall, and Sakar (1988) by Akyol (2013) and the Pronunciation and Context Scales adapted from May (1986). Other data were collected through videos, narrative and informative texts, reading comprehension achievement tests, and journals where the researcher recorded observations. Reading comprehension achievement questions were prepared and administered by the researchers to determine how well the students understood the text. The within-text comprehension questions in this test are simple comprehension questions whose answers can be found directly in the text. On the other hand, beyond-text comprehension questions, while related to the topic of each text, do not have answers directly in the text; they require students to make inferences or answer by comparing with similar events and phenomena in their own lives. After these questions were prepared, they were reviewed by an academic expert in Turkish Language Teaching, a special education expert, and two primary school teachers. The questions were revised based on their suggestions and then administered to the students in the study group.

With the "Error Analysis Inventory," errors made by the student during oral reading are determined using the Pronunciation and Context Scale to identify word and sound knowledge, while the comprehension level is determined by the students' responses to questions asked about the text after silent reading.

In the Pronunciation and Context Scale, we record the words misread by the student during reading. Then, we divide the total score the student receives by the total score they should receive to calculate the percentage score. Scoring is calculated as follows (Akyol, 2013):

Context Scale ratings: 0 = Unable to Read, 1 = Teacher Provided the Word, 2 = Did Not Include the Same Words/Structures, 3 = Included the Same Words/Structures, 4 = Put Own Words in the Same Expression as the Author, 5 = Self-Corrected

Pronunciation Scale ratings: 0 = No Similarity with the Word Read, 1 = 1 Letter Similarity with



the Word Read, 2 = 2 Letter Similarity with the Word Read, N = N Letter Similarity with the Word Read

To determine the level of understanding related to the text, simple (in-text) and in-depth (outof-text) questions were asked to the student. For questions requiring simple understanding, scores of 2, 1, 0 were given based on the full answer situation, and for questions requiring indepth understanding, scores of 3, 2, 1, 0 were given based on the full answer situation.

Three types of reading levels are determined with the inventory: Independent level, instructional level and frustration level. The reading levels and score ranges are presented in Table 1.

 Table1. Reading Levels and Percentages (Ekwall, & Shanker, 1998; Cited in Akyol, 2013)

 Reading Levels
 Word Recognition

 Comprehension

Reading Levels	Word Recognition	Comprehension
Independent Reading Level*	%99+	%90+
Instructional Reading Level**	%95+	%75+
Frustration Reading Level***	%90-	%75-
*Indonandant mading lawal indicates the shild!	ability to used and communicated without the use	d for too shor or other assistance

\*Independent reading level indicates the child's ability to read and comprehend without the need for teacher or other assistance.

\*\* Instructional reading level refers to the child's ability to read and comprehend with the support of a teacher or other assistance as needed.

\*\*\* Frustration reading level indicates the child's minimal understanding of what is read and/or making a significant number of reading errors.

During the 7-week period, classroom practices were observed by the researchers. Observations were recorded in a researcher's diary, and common identified items by two researchers were documented. These items were used as the dataset for the third sub-problem of the study.

### Data Collection and Analysis

To determine the students' oral reading skills and comprehension levels before the interventions, narrative and informative texts were selected and read to the students. Subsequently, the pre-test scores for both word recognition and comprehension levels were determined based on their performance on these texts. The findings obtained from the pre-tests are presented in Table 2.

Student	Text Title	Word	Number of	Error	Word	Comprehension
		Count	Words Read	Count	Recognition	Percentage
			per Minute		Percentage	
V	Diş Macunu <sup>*</sup>	190	35	48	%90-	%23
K	İmece**	198	28	36	<b>%90-</b>	%62
E	Diş Macunu	190	37	45	%90-	%28
E	İmece	198	36	38	<b>%90-</b>	%60

Table 2. Students' Reading Fluency and Comprehension Level Before the Implementation

\*Diș Macunu is an informative text.

\*\*İmece is a narrative text.

When looking at Table 2, it is observed that student K made a total of 48 reading errors while reading the informative text ' Diş Macunu (Toothpaste).' K's word recognition is at a level of 90% (frustration level), comprehension at 23% (frustration level), and oral reading proficiency at 90% (frustration level). Student E, on the other hand, made a total of 36 errors while reading the same text, with word recognition at a level of 90% (frustration level), comprehension at 28% (frustration level), and oral reading proficiency at 90% (frustration level), and oral reading proficiency at 90% (frustration level). When reading the narrative text 'İmece,' student K made 36 errors, while student E made 38 errors. Both their word recognition percentages and oral reading proficiencies are at afrustration level of 90%. When evaluated in terms of comprehension level, it is determined that student K is at 62% and



student E is at 60%, indicating that they are still at a frustration level.

Six narrative and six informative texts, selected from textbooks approved by the Ministry of National Education to be taught as course books to 2nd and 3rd-grade students, were taught to students K and E using repeated and paired reading methods over a period of 7 weeks and 35 lesson hours. Although the students were in the 4th grade, texts from lower grades' textbooks were chosen due to their difficulties in reading. However, the number of words in a text, according to their calendar ages, was selected within the range of 100-200 words (Akyol, 2013) to match their age levels. The participants' gender had no impact on the research process. The letters K and E were used solely for coding purposes. The study focused on comparing the outcomes of the two techniques. The texts were presented to a Turkish language teaching expert, a special education expert, and two primary school teachers for review and approval. Texts deemed too lengthy by the experts were shortened by the researchers without compromising their coherence and meaning and were then presented to the experts again. Some of the texts were also shortened beforehand to ensure that they did not exceed 200 words and maintained their coherence before being read to the students. After confirming their applicability, the texts were read to the students in the study group.

After obtaining necessary permissions from their parents, the students' readings during the implementation were recorded as videos. Three in-text and three out-of-text comprehension questions were created for each text. Three subject matter experts were consulted for the selection, organization of texts, and creation of questions. At the end of the 35-hour implementation, the texts used in the preliminary assessment to determine the student's reading levels were read to them again, and the reading process was recorded.

The collected data were scored separately by two researchers and one rater field expert according to the Incorrect Analysis Inventory, aiming to ensure the reliability of scoring. The data were then combined by taking the arithmetic average of the three independent scorings.

# **Findings**

During the process, the number of words read by the students per minute and the errors made during reading were recorded and detailed in Table 3.

	Text Type			XX7 1	Number	<b>n</b> *
Student		Text Title	The Week of	Word	of Words	Error*
Student	rene rype		Implementation	Count	Read per	Count
					Minute	
		Niçin Spor Yapmalıyız	Week 1	195	46	18
		İskelet	Week 2	180	51	17
	Informativa	El El Üstünde	Week 3	200	43	26
	Informative Text	Kuyruklu Yıldız ile Dünya	Week 4	186	50	15
		Çiftek	Week 5	164	35	20
		Kurallara Uygun		170	38	21
IZ.		Davranmak	Week 6			
K (Repeated)				Mean	43.8	19.5
(Repeated)		Tiyatro	Week 1	197	38	16
		Çocukluğumdaki	West 2	188	32	26
	Namating	Narrative Kafasını Pencerede	Week 2			
			W. 1 2	190	62	18
	Text	Unutmasın	Week 3			
		Teller Nasıl Konuşturuldu	Week 4	175	50	14
		Kumbara İçi Dolu Para	Week 5	156	55	16
		-				

#### Table 3. Errors During Implementation



		Masal Masal İçinde	Week 6	168	45	22
				Mean	47	18.6
		Niçin Spor Yapmalıyız	Week 1	195	42	13
		İskelet	Week 2	180	44	16
	To famo ation	El El Üstünde	Week 3	200	38	27
	Informative	Kuyruklu Yıldız ile Dünya	Week 4	186	50	18
	Text	Çiftek	Week 5	164	35	22
		Kurallara Uygun Davranmak	Week 6	170	39	30
E				Mean	41.3	21
(Paired)		Tiyatro	Week 1	197	38	28
		Çocukluğumdaki Bayramlar	Week 2	188	35	22
	Narrative Text	Kafasını Pencerede Unutmasın	Week 3	190	55	13
		Teller Nasıl Konuşturuldu	Week 4	175	48	16
		Kumbara İçi Dolu Para	Week 5	156	49	24
		Masal Masal İçinde	Week 6	168	47	27
		3		Mean	45.3	21.6

\* The most common errors are misreading, adding and skipping.

When Table 3 is examined, it is observed that in the informative texts, K made the most errors in the text "El El Üstünde" (26), and in the narrative texts, the most errors were made in the text "Çocukluğumdaki Bayramlar" (26) using the repeated reading technique. The number of words read per minute is highest in the informative text "İskelet" (51) and in the narrative text "Kafasını Pencerede Unutmasın" (62).

The averages of the number of words read per minute and the number of errors made were examined. In informative texts, student K read approximately 44 words per minute, while student E read 41 words per minute. When looking at the number of errors, it was found that student K made approximately 19 errors, while student E made 21 errors. In narrative texts, student K read approximately 47 words per minute, while student E read 45 words per minute. When looking at the number of errors, it was found that student K read approximately 47 words per minute, while student E read 45 words per minute. When looking at the number of errors, it was found that student K made approximately 19 errors, while student E made 22 errors. Both students read more words per minute in narrative texts, with student K (47) reading more words compared to student E (45). It was observed that K made fewer errors in narrative texts, while E made fewer errors in informative texts.

In the paired reading sessions conducted, it was observed that E, who participated, made the most errors in the informative text "Kurallara Uygun Davranmak" (30) and in the narrative text "Tiyatro" (28). The number of words read per minute was highest in the informative text "Kuyruklu Yıldız ile Dünya" (50) and in the narrative text "Kafasını Pencerede Unutmasın" (55).

It is notable that the comprehension score of student K, who underwent repeated reading technique for informative texts, is higher than that of student E, who underwent paired reading technique. Furthermore, it is noteworthy that the comprehension score of student E, for whom the AB single-case design process was planned with the paired reading method, is higher than that of student K, who underwent repeated reading technique, for narrative texts.

**Table 4.** Students' Reading Fluency and Comprehension Levels Before and After the Implementation

Before-After	Student	Text Title	$WDC^*$	NWR*	$NE^*$	WRP*	$UP^*$	PRAS*
	K	Diş Macunu	190	35	48	%90-	%23	%90-



Before Implementation		İmece	198	28	36	%90-	%62	%90-
	Е	Diş Macunu	190	37	45	%90-	%28	%90-
	E	İmece	198	36	38	%90-	%60	%90-
After Implementation	K	Diş Macunu	190	58	19	%90	%78	%90
		İmece	198	62	13	%93	%80	%93
	Е	Diş Macunu	190	68	12	%94	%77	%94
		İmece	198	59	16	%92	%83	%92

\*PRAS = Percentage of Read Aloud Skill, UP = Understanding Percentage, WRP = Word Recognition Percentage, NE = Number of Error, NWR = Number of Words Read, WDC= Word Count

When examining Table 4, it is observed that prior to the intervention, student K made a total of 48 reading errors while reading the informative text "Toothpaste," with a word recognition rate of 90% (frustration level), comprehension rate of 23% (frustration level), and oral reading proficiency rate of 90% (frustration level). After the intervention, it is evident that there was an improvement from 48 errors to 19 errors, indicating a decrease in errors. Additionally, it is noted that the word recognition percentage, comprehension percentage, and oral reading proficiency percentage progressed from frustration level to instructional level.

Prior to the intervention, when reading the narrative text "İmece" student K made a total of 36 reading errors, with a word recognition rate of 90% (frustration level), comprehension rate of 62% (frustration level), and oral reading proficiency rate of 90% (frustration level). After the intervention, it is evident that there was an improvement from 36 errors to 13 errors, indicating a decrease in errors. Additionally, it is noted that the word recognition percentage, comprehension percentage, and oral reading proficiency percentage progressed from frustration level.

Prior to the intervention, when reading the informative text "Toothpaste," student E made a total of 45 reading errors, with a word recognition percentage of 90% (frustration level), comprehension percentage of 28% (frustration level), and oral reading proficiency percentage of 90% (frustration level). After the intervention, it is evident that there was an improvement from 45 errors to 12 errors, indicating a decrease in errors. Additionally, it is noted that the word recognition percentage, comprehension percentage, and oral reading proficiency percentage progressed from frustration level to instructional level.

Prior to the intervention, when reading the narrative text "İmece," student E made a total of 38 reading errors, with a word recognition percentage of 90% (frustration level), comprehension percentage of 28% (frustration level), and oral reading proficiency percentage of 90% (frustration level). After the intervention, it is evident that there was an improvement from 38 errors to 16 errors, indicating a decrease in errors. Additionally, it is noted that the word recognition percentage, comprehension percentage, and oral reading proficiency percentage progressed from frustration level to instructional level.

After recording all the implementation processes as researcher logs by one of the researchers, the findings emerged from transcribing these records are as follows: It was observed that both E and K, who underwent both repeated and paired reading during the interventions, increased their participation in class during and after the interventions. There was an increase in their willingness to speak up in class, and their levels of self-expression improved. It was also observed that the students' curiosity and interest in books and reading increased. Both the classroom teacher and the support education room teacher provided explanations supporting these observations. The teachers also expressed that the motivation and participation of both students in the classes increased, and improvement in their attitude towards reading was observed.



### **Results, Discussion, and Recommendations**

This AB single-case design, aimed at enhancing the reading and comprehension levels of two 4th-grade students (one boy and one girl) with mild intellectual disabilities attending the support class of a small primary school in a province in Central Anatolia, revealed that both repeated and paired reading methods had a positive impact on the students' reading and comprehension abilities.

After applying paired and repeated reading techniques to two students with mild intellectual disabilities, it has been determined that both students have improved their word recognition and comprehension percentages. These improvements have elevated their levels from frustration levels to instructional levels.

Prior to the intervention, K's reading speed in informative texts was 35 words per minute, which improved to an average of 44 words per minute across six texts during the intervention. Similarly, the number of errors decreased from 48 to an average of 19 across the six texts. In narrative texts, K initially read 28 words per minute, but this increased to an average of 47 words per minute during the intervention process. The number of errors in narrative texts also decreased, dropping from 36 to an average of 19 across the six texts. The pre-test results indicated that K made more errors when reading informative texts compared to narrative texts, with word recognition and comprehension percentages for both text types falling within the frustration level. However, following the repeated reading interventions implemented during the AB single-case design process, improvements were observed. K's word recognition and comprehension levels for both types of texts rose from the frustration level to the instructional level. Elhoweris (2017) revealed that repeated reading interventions significantly contribute to improving the comprehension skills of 3rd, 4th, and 5th-grade students with learning difficulties. Alghafri, and Al Hosni (2023) also found that students' comprehension levels increased after repeated reading interventions in their study aimed at enhancing the comprehension skills of 4th grade students. Numerous other research findings in the literature support the conclusion reached by this study (Benner, 2007; Dündar, & Akyol, 2014; Gorsuch, & Taguchi, 2008; Herberg, McLaughlin, Derby, & Weber, 2012). Additionally, some different research results have shown that repeated reading enhances fluent reading and develops metacognitive reading strategies (Chang, 2012; Gorsuch, & Taguchi, 2010).

For E, who received paired reading intervention, before the intervention, the word count per minute in informative texts was 37, which increased to an average of 41 words across six texts during the intervention process. The number of errors decreased from 45 to an average of 19 across six texts during the intervention. In narrative texts, before the intervention, E's word count per minute was 36, which increased to an average of 45 words across six texts during the intervention. The number of errors decreased from 38 to an average of 21 across six texts during the intervention. In the pre-test administered to E, it was found that she made more errors while reading informative texts compared to narrative texts, and her word recognition and comprehension percentages for both types of texts were at the frustration level. However, as a result of the paired reading interventions carried out within the framework of the AB singlecase design after the pre-test, it was determined that both word recognition rates and comprehension levels increased for both types of texts, reaching the instructional level from the frustration level. Mastropieri, Scruggs, Mohler, Beranek, Spencer, Boon, & Talbott (2001) concluded from their research with middle school students with learning difficulties that paired reading interventions significantly increased students' comprehension levels and emphasized the importance of peer education. Anggeraini, Nurhasanah, & Madenta (2020) mentioned that paired reading interventions also increased students' attention spans towards the text. Numerous



other research findings in the literature support the conclusion reached by this study (Adviento-Rodulfa, & Lopez, 2022; Çayır & Ulusoy, 2014; Kardaş-İşler, & Şahin, 2016; Ketenoğlu-Kayabaşı, & Akyol, 2018).

Both student K's and student E's fluent reading and comprehension levels in narrative texts are higher compared to informative texts. When examining the literature, it is also observed that students have lower word recognition and comprehension percentages in informative texts (Coşkun, & Erdin, 2014; Golke, Hagen, & Wittwer, 2019; Kodan, & Bozdemir, 2016; Şahin, 2013). In general, it can be said that a similar conclusion was reached for both students in this study, indicating that word recognition and comprehension levels for narrative texts are higher than informative texts.

It is noteworthy that student K, whose AB single-case design process was planned with the repeated reading method, has a higher comprehension score in informative texts compared to student E, who received paired reading intervention. Throughout the period, it can be said that K's repetition of the text multiple times and ensuring that incorrectly read words are corrected each time has increased the word recognition percentage, thus affecting the comprehension level as well. Studies in the literature have shown the positive effects of repeated reading interventions on word recognition and comprehension levels (Alghafri, & Al Hosni, 2023; Dündar, & Akyol, 2014; Elhoweris, 2017; Gorsuch, & Taguchi, 2008; Herberg, McLaughlin, Derby, & Weber, 2012; Lee & Yoon, 2017).

It is worth mentioning that student E, whose AB single-case design process was planned with the paired reading method, has a higher comprehension score in narrative texts compared to student K, who received repeated reading intervention. It can be speculated that there is an interaction between the peers during the paired reading with E throughout the period, and this may have contributed to E's higher comprehension level in narrative texts compared to K. The literature also emphasizes that comprehension levels increase when narrative texts are read interactively (Çetinkaya, Öksüz, & Öztürk, 2018; Uğur, & Tavşanlı, 2022; Yurtbakan, & Erdoğan, 2023; Wixson, 2017). Furthermore, studies have shown the positive effects of paired reading interventions on word recognition and comprehension levels (Adviento-Rodulfa, & Lopez, 2022; Çayır, & Ulusoy, 2014; Kardaş-İşler, & Şahin, 2016; Ketenoğlu-Kayabaşı, & Akyol, 2018).

Throughout the research process, observations regarding the students' classroom participation revealed that K, who underwent repeated reading, and E, who underwent paired reading, demonstrated increased classroom engagement, a higher frequency of volunteering to speak, and improved self-expression skills. Additionally, it was observed that the students developed greater curiosity and interest in books and reading. There was an increase in their willingness to participate in discussions, improvement in their ability to express themselves, and an observed improvement in their curiosity and interest in books and reading. The classroom teacher and the support education room teacher of both E and K corroborated these observations made by the researchers. The teachers also noted an increase in the motivation and participation levels of both students in class, stating that improvements in reading were observed. All these observations contribute to supporting the findings of the research.

Based on the results obtained from the research and comparisons made with the literature regarding the findings, the following recommendations have been developed:



- The study determined that repeated and paired reading practices conducted with 4thgrade students with mild intellectual disabilities have positive contributions to students' reading and comprehension skills. Therefore, it is recommended to frequently incorporate repeated and paired reading practices in the educational process to improve the reading and comprehension skills of special needs students.
- This study utilized repeated reading and paired reading methods. It is suggested that different fluent reading methods be applied experimentally, and the results shared with stakeholders.
- Reading and comprehension are fundamental skills in today's world. Therefore, it is highly important for teachers to employ various methods to enhance their students' fluent reading and comprehension skills.
- It was found in this study that repeated reading in informative texts and paired reading in narrative texts positively affected students' word recognition and comprehension. Therefore, especially in such study groups, planning involving the combined use of these two methods is recommended.
- This research was conducted with students with mild intellectual disabilities. Similar studies should be conducted with normally developing students and gifted students using different fluent reading methods.
- Observations made during the research process regarding students' participation in class showed that students' participation increased, their expression levels improved when speaking in class, and their curiosity and interest in books and reading increased. Interactive activities are recommended to increase the participation and motivation of students with mild intellectual disabilities.

### Acknowledgments:

We would like to thank our students and their families for their voluntary participation in the research process. We would like to thank the journal secretariat, editor and referees who contributed to the publication of the study.

#### **Funding:**

No external funding was received for the research reported in the paper.

#### **Ethics Statements :**

The study is an original work, and proper citations have been made in the text and references for the developers of the instruments used for data collection. Ethical principles were adhered to during the data collection process. The study is not under review in any other journal. There is no conflict of interest among the authors.

#### **Conflict of Interest:**

In this study, there is no conflict of interest among the authors. The contribution of the authors to the research is equal.

# **Informed Consent:**

As the data were collected from students, informed consent was obtained from their parents.



### Data availability:

The data are kept confidential by the researchers. Contact with the researchers is required for access.

### References

- Adviento-Rodulfa, C. and Lopez, M. R. S. (2022). Paired reading strategy and comprehension level among grade 10 students. *World Journal of English Language*, 12(1), 104-104. https://doi.org/10.5430/wjel.v12n1p104
- Alghafri, A. and Al Hosni, R. (2023). The effect of repeated reading strategy on comprehension among grade four school students. *Participatory Educational Research*, *10*(3), 21-36. http://dx.doi.org/10.17275/per.23.42.10.3
- Akyol, H. and Ketenoğlu Kayabaşı, Z. E. (2018). Improving the reading skills of students with reading difficulties: An action research. *Education and Science*, 43(193), 143-158. http://dx.doi.org/10.15390/EB.2018.7240
- Akyol, H. (2013). Türkçe öğretim yöntemleri [The Turkish language teaching methods.]. Pegem A Yayıncılık.
- Akyol, H. (2019). Türkçe ilkokuma yazma öğretim [Turkish primary reading and writing teaching]. Pegem A Yayıncılık.
- Akyol, H., and Sural, Ü. Ç. (2020). Developing reading, reading comprehension and motivation: An action research study. *Education and Science*, *46*(205), 69-92.
- Anggeraini, Y., Nurhasanah, and Madenta, T. (2020). EFL learners` reading habit and their reading comprehension enhancement through partner reading. *Getsempena English Education Journal*, 7(2), 294–306. https://doi.org/10.46244/geej.v7i2.985
- Begeny, J.C., and Silber, J.M. (2006). An examination of group-based treatment packages for increasing elementary-aged students' reading fluency. *Psychology in the Schools*, 43(2), 183-915. https://doi.org/10.1002/pits.20138
- Benner, G. J. (2007). The relative impact of remedial reading instruction on the basic reading skills of students with emotional disturbance and learning disabilities, *Journal of Direct Instruction*, 7(1), 1-15.
- Berkeley, S., Mastropieri, M. A., and Scruggs, T. E. (2011). Reading Comprehension Strategy Instruction and Attribution Retraining for Secondary Students With Learning and Other Mild Disabilities. *Journal of Learning Disabilities*, 44(1), 18-32. https://doi.org/10.1177/0022219410371677
- Biemiller, A. and Siegel, L.S. (1997). Longitudinal study of the effects of the "bridge" reading program for children at risk for reading failure. *Learning Disability Quarterly*, 20, 83-92. https://doi.org/10.2307/1511216
- Blum, I.H. and Koskinen, P.S. (1991). Repeated reading: A strategy for enhancing fluency and fustering expertise. *Theory into Practise*, *30* (*3*), *195-200*.
- Breznitz, Z. (1997). Enhancing the reading of dyslexic children by reading acceleration and auditory masking. *Journal of Educational Psychology*, 89(1), 103–113. https://doi.org/10.1037/0022-0663.89.1.103
- Calet, N., Pérez-Morenilla, M. C., and Santos-Roig, M. D. l. (2019). Overcoming reading comprehension difficulties through a prosodic reading intervention: A single-case study. *Child Language Teaching and Therapy*, 35(1), 75-88. https://doi.org/10.1177/0265659019826252
- Chang, A. (2012). Improving reading rate activities for EFL students: Improving reading rate activities for EFL students: Timed reading and repeated oral reading. *Reading in a Foreign Language*, 24(1), 56–83.



- Chard, D. J., Vaughn, S. and Tyler, B. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, *35*, 386–407. https://doi.org/10.1177/00222194020350050101
- Conderman, G., and Strobel, D. (2008). Fluency flyers club: An oral reading fluency intervention program. *Preventing School Failure: Alternative Education for Children and Youth*, 53(1), 15-20.
- Coyne, M. D., Kame'enui, E. J. and Simmons, D. C. (2001). Prevention and intervention in beginning reading: Two complex systems. *Learning Disabilities Research and Practice*, 16 (2), 62-73. https://doi.org/10.1111/0938-8982.00008
- Coşkun, İ., and Erdin, G. (2014). Hafif düzeyde zihinsel yetersizliği olan kaynaştırma öğrencilerinin dinlediğini anlama becerilerinin incelenmesi [Investigation of listening comprehension skills of mainstreaming students with mild mental retardation.]. *Akademik Bakış Uluslararası Hakemli Sosyal Bilimler Dergisi[Academic Sight International Refereed Online Journal]*, (41), 1-18.
- Çayır, A., and Ulusoy, M. (2014). Akıcılığı geliştirme programının ilkokul ikinci sınıf öğrencilerinin okuma ve anlama becerileri üzerindeki etkisi [The effects of fluency development program on the second graders' reading and comprehension skills.]. *Cumhuriyet Uluslararası Eğitim Dergisi[Cumhuriyet International Journal of Education]*, 3(2), 26-43.
- Çetinkaya, F. Ç., Öksüz, H. İ. and Öztürk, M. (2018). Etkileşimli okuma ve kelime hazinesi [Dialogic reading and vocabulary.]. *Journal Of International Social Research*, 11(60), 705-715.
- Deeney, T. A. (2010). One-minute fluency measures: Mixed messages in assessment and Instruction. *The Reading Teacher*, 63, 440-450. https://doi.org/10.1598/RT.63.6.1
- Di Blasi, F. D., Buono, S., Cantagallo, C., Di Filippo, G. and Zoccolotti, P. (2019). Reading skills in children with mild to borderline intellectual disability: A cross-sectional study on second to eighth graders. *Journal of Intellectual Disability Research*, 63(8), 1023-1040. https://doi.org/10.1111/jir.12620
- Dionne, M., and Martini, R. (2011). Floor time play with a child with autism: A single-subject study. *Canadian Journal of Occupational Therapy*, 78(3), 196-203.
- Dufva, M., Niemi, P., and Voaten, M. J. M., (2001). The role of phonological memory, word recognition, and comprehension skills in reading development: From preschool to grade 2. *Reading and Writing: An Interdisciplinary Journal*, 14, 91-117.
- Duke, N. K., and Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), What research has to say about reading instruction (3rd ed., pp. 205-242). International Reading Association.
- Dündar, H., and Akyol, H. (2014). A case study regarding definition and solution of reading and comprehensive problems. *Education and Science*, *39*(171), 361-377.
- Eckert, T. L., Dunn, E. K., and Ardoin, S. P. (2006). The effects of alternate forms of performance feedback on elementary-aged students' oral reading fluency. *Journal of Behavioral Education*, 15, 148-161. https://doi.org/10.1007/s10864-006-9018-6
- Ekwall, E. E., and Shanker, J. L. (1988). *Diagnosis and remediation of the disabled reader* (3rd ed.). Allyn and Bacon, Inc.
- Elhoweris, H. (2017). The impact of repeated reading intervention on improving reading fluency and comprehension of Emirati students with learning disabilities. *International Journal of Psycho-Educational Sciences*, 6(2), 36-48.
- Faver, S. (2009). Repeated reading of poetry can enhance reading fluency. *The Reading Teacher*, 62, 350-352. http://dx.doi.org/10.1598/RT.62.4.8



- Golke, S., Hagen, R., and Wittwer, J. (2019). Lost in narrative? The effect of informative narratives on text comprehension and metacomprehension accuracy. *Learning and Instruction*, 60, 1-19. https://doi.org/10.1016/j.learninstruc.2018.11.003
- Georgiou, G., Inoue, T., and Parrila, R. (2023). Are vocabulary and word reading reciprocally related? *Scientific Studies of Reading*, 27 (2), 160-168. DOI: 10.1080/10888438.2022.2123275
- Gorsuch, G., and Taguchi, E. (2008). Repeated reading for developing reading fluency and reading comprehension: The case of EFL learners in Vietnam. *System*, *36*(2), 253-278. https://doi.org/10.1016/j.system.2007.09.009
- Gorsuch, G., and Taguchi, E. (2010). Developing reading fluency and comprehension using repeated reading: Evidence from longitudinal student reports. *Language Teaching Research*, 14(1), 27-59. https://doi.org/10.1177/1362168809346494
- Güneş, F. (2009). Hızlı okuma ve anlamı yapılandırma [Speed reading and structuring meaning]. Nobel Akademik Yayıncılık.
- Herberg, J., McLoughlin, T. F., Derby, K. M., and Weber, K. P. (2012). The effects of repeated readings and flashcard error drill the reading accuracy and fluency with rural middle school student with learning disabilities. *Academic Research International*, 2(3), 388-393.
- Hulme, C., and Snowling, M. J. (2011). Children's reading comprehension difficulties: Nature, causes, and treatments. *Current Directions in Psychological Science*, 20(3), 139-142. https://doi.org/10.1177/0963721411408673
- Hudson, R. F., Lane, H. B., and Pullen, P. C. (2005). Reading fluency assessment and instruction: What, why, and how?.*The Reading Teacher*, 58, 702-714. http://www.jstor.org/stable/20204298
- Kardaş-İşler, N., and Şahin, A. E. (2016). Bir ilkokul 4. sınıf öğrencisinin okuma bozukluğu ve anlama güçlüğü: bir durum çalışması [Reading disability and comprehension difficulty of a 4th grade student: a case study.]. *Ana Dili Eğitimi Dergisi[Journal of Mother Tongue Education]*, 4(2), 174-186.
  - https://doi.org/10.16916/aded.23121
- Kaya-Özgül, B., and Ateş, S. (2023). Sınıf öğretmeni adaylarının okuma ve yazma güçlüklerini belirleme düzeylerinin incelenmesi [Investigation of ıdentifying levels of reading and writing difficulties of pre-service primary school teachers.]. Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi[Ahi Evran University Institute of Social Sciences Journal], 9(1), 20-39. https://doi.org/10.31592/aeusbed.1218927
- Kodan, H., and Bozdemir, H. (2016). İlköğretim 4. sınıf öğrencilerinin dinlediklerini anlama düzeyinin belirlenmesi [Defining the degree of listening comprehension of 4th grade students of primary education.]. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi[Journal of Faculty of Education], 1(37), 15-27.
- Kuhn, M. R., Schwanenflugel, P. J., Meisinger, E. B., and Levy, B. A., & Rasinski, T. V. (Eds.).
  (2010). Aligning theory and assessment of reading fluency: Automaticity, prosody, and definitions of fluency. *Reading Research Quarterly*, 45(2), 230–251. https://doi.org/10.1598/RRQ.45.2.4
- Kuhn, M. R., and Stahl, S. A. (2003). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology*, 95(1), 3–21. https://doi.org/10.1037/0022-0663.95.1.3
- Laberge, D., and Samuels J. S. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, *6*(2), 293-323. https://doi.org/10.1016/0010-0285(74)90015-2



- Lee, J., and Yoon, S. Y. (2017). The effects of repeated reading on reading fluency for students with reading disabilities: A Meta-Analysis. *Journal of Learning Disabilities*, 50(2), 213-224. https://doi.org/10.1177/0022219415605194
- Mastropieri, M. A., Scruggs, T., Mohler, L., Beranek, M., Spencer, V., Boon, R. T., and Talbott, E. (2001). Can middle school students with serious reading difficulties help each other and learn anything?. *Learning disabilities research and Practice*, 16(1), 18-27. https://doi.org/10.1111/0938-8982.00003
- Ministry of National Education. (2018). Regulation on special education services. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=24736andMevzuatTur=7andMevzu atTertip=5
- Monster, I., Tellings, A., Burk, W. J., Keuning, J., Segers E., and Verhoeven, L. (2022). Word properties predicting children's word recognition. *Scientific Studies of Reading*, 26(5), 373-389, DOI: 10.1080/10888438.2021.2020795
- O'Connor, R. E., White, A., and Swanson H. L. (2007). Repeated reading versus continuous reading: influences on reading fluency and comprehension. *Exceptional Children*, 74, 31-46. https://doi.org/10.1177/001440290707400102
- Pearson, P. D., and Cervetti, G. N. (2015). Fifty years of reading comprehension theory and practice. *Research-based practices for teaching Common Core literacy*, 1-24.
- Pikulski, J., and Chard, D. (2005). Fluency: Bridge between decoding and reading comprehension. *The reading Teacher*, 58, 510-519. https://www.jstor.org/stable/20205516
- Rasinski, T. V. (2003). The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension. Scholastic.
- Rasinski, T. V. (2004). Creating fluent readers. *Educational Leadership*, 61, 46-51. https://www.researchgate.net/publication/289978010\_Creating\_Fluent\_Readers
- Rasinski, T. V., Padak, N., Linek, W., and Sturtevant, E. (1994). Effects of fluency development on urban second-grade readers. *Journal of Educational Research*. 87, 158-165.
- Rasinski, T. V. (2012). Why reading fluency should be hot! The Reading Teacher, 65(8), 516–522.
- Riley-Tillman, T. C., and Burns, M. (2009). *Evaluating educational interventions single-case design for measuring response to intervention*. The Guilford Press.
- Samuels, S. J. (1997). The method of repeated readings. *The Reading Teacher*, 50 (5), 376-381.
- Sarroub, L., and Pearson, P. D. (1998). Two steps forward, three steps back: The stormy history of reading comprehension assessment. *The Clearing House*, 72(2), 97-105. https://core.ac.uk/download/pdf/188045216.pdf
- Shelton, A., Wexler, J., Silverman, R. D., and Stapleton, L. M. (2019). A Synthesis of Reading Comprehension Interventions for Persons With Mild Intellectual Disability. *Review of Educational Research*, 89(4), 612-651. https://doi.org/10.3102/0034654319857041
- Snow, C. E. (2002). Reading for understanding: Toward an R&D program in reading comprehension. RAND Corporation.
- Şahin, A. (2011). Farklı yöntemlerle okuma-yazma öğrenmiş beşinci sınıf öğrencilerinin okuduğunu anlama erişileriyle okuma hızlarının karşılaştırılması [Comparing reading comprehension level and oral reading speed of 5th class students who had first reading writing through different methods.]. *Hacettepe Üniversitesi Eğitim Fakültesi* Dergisi[Hacettepe University Journal of Education], 41(41), 423-433.
- Şahin, A. (2013). The effect of text types on reading comprehension. *Online Submission*, *3*(2), 57-67.
- Şahin, A., and Bozdağ, T. (2020). İlkokullarda okuma güçlüğünde kullanılan eğitsel uygulamalara ilişkin öğretmen algılarının incelenmesi [251Investigation of teachers' perceptions about educational practices used in reading difficulties in primary schools].



Anadolu Kültürel Araştırmalar Dergisi[Journal of Anatolian Cultural Research], 4(3), 250-263.

- Therrien, W. J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education*, 25,252–261.
- Therrien, W. J., and Kubina, R. M. (2006). Developing reading fluency with repeated reading. *Intervention in School and Clinic, 41,* 156-160.
- Torgesen, J. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research and Practice*, *15*(1), 55–64.
- Torgesen, J. K., and Hudson, R. F. (2006). Reading fluency: Critical issues for struggling readers. What research has to say about fluency instruction, 130-158.
- Uğur, S., and Tavşanlı, Ö. F. (2022). Öğretmen rolüyle etkileşimli okuma uygulamalarının dördüncü sınıf öğrencilerinin okuduğunu anlama başarısına etkisi [The effects of interactive reading practices with the role of the teacher on 4th grade students' reading comprehension success.]. *Türk Eğitim Bilimleri Dergisi[The Journal of Turkish Educational Sciences]*, 20(2), 655-678.
- Valenzuela, V. V., Gutierrez, G., and Lambros, K. M. (2014, September). Response to Intervention: Using single-case design to examine the impact of tier 2 mathematics interventions. In School Psychology Forum (Vol. 8, No. 3).
- Vaughn, S., and Thompson, S. L. (2004). Research-based methods of reading instruction: Association for supervision and curriculum development. Alexandria.
- Yılmaz, M. (2008). Kelime tekrar tekniğinin akıcı okuma becerilerini geliştirmeye etkisi [The effect of word drıll technique on improving fluently reading of skills.]. *Türk Eğitim Bilimleri Dergisi[The Journal of Turkish Educational Sciences]*, 6(2), 323-350.
- Yurtbakan, E., and Erdoğan, T. (2023). Öğretmen ve ebeveyn rehberliğinde yapılan etkileşimli okuma uygulamalarının ilkokul öğrencilerinin okuduğunu anlama becerilerine etkisi [The effect of dialogic reading practices under the guidance of teachers and parents on primary school students' reading comprehension skills.]. Kocaeli Üniversitesi Eğitim Dergisi[Kocaeli University Journal of Education], 6(2), 467-493.
- Wakeman, S. Y., Pennington, R., Cerrato, B., Saunders, A., and Ahlgrim-Delzell, L. (2021). Parent perceptions regarding literacy instruction for students with intellectual disability. *Journal of Intellectual Disability Research*, 65(1), 86-98. https://doi.org/10.1111/jir.12795
- Winn, B. D., Skinner H. C., Oliver, R., Hale, A. D., and Ziegler, M. (2006). The effects of listening while reading and repeated reading on the reading fluency of adult learners. *Journal of AdolescentandAdult Litercy*, 50(3), 196-205.
- Wixson, K. K. (2017). An interactive view of reading comprehension: Implications for assessment. Language, Speech, and Hearing Services in Schools, 48(2), 77-83. https://doi.org/10.1044/2017\_LSHSS-16-0030

